DETAILED ACTION

This non-final rejection is in response to Applicant's request for continued examination filed on 9/16/2011. Applicant amends claims 1, 3, 15, 18, 37, and 45, previously cancelled claims 2, 5, 6, 8-14, 16, 17, 21-36, 38, and 42-44, and adds claims 46-49. Accordingly, Applicant presents claims 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45-49 for further examination.

I. CONTINUED EXAMINATION UNDER 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/16/2011 has been entered.

II. INFORMATION DISCLOSURE STATEMENT

The examiner has considered the information disclosure statement filed on 11/1/2011.

III. RESPONSE TO ARGUMENTS

A. Applicant's arguments with respect to claims 1, 3, 4, 7, 15, 18-20, 37, 39-41, and 45 are not persuasive because *Hughes* and *Yeager* teach different mailboxes associated with different recipients.

Applicant argues that *Hughes*, *Yeager*, and *Graham* do not disclose retrieving a message from a first mailbox, computing a message tag, then comparing message tags to messages from a second mailbox wherein the second mailbox is associated with a different electronic mail

recipient than the first mailbox. The previous action relied on both *Hughes* and *Yeager* to teach this particular feature.

As to the comparison feature, the rejection cited *Hughes* at Fig. 10, item 1002 for retrieving a message and column 19, lines 17-27 for comparing messages tags. *Hughes* however did not expressly state that the message tags are computed from messages retrieved from different mailboxes.

To resolve this deficiency, the rejection then recited *Yeager* at column 7, line 66 to column 8, line 1 which discloses multiple user folders (i.e., mailbox) for different users. In reading *Yeager*, it would have been obvious to one of ordinary skill in the art that the messages retrieved in *Hughes* could be retrieved from different mailboxes of different users. In other words, *Hughes* discloses retrieving messages and computing tags from the messages. *Yeager* discloses that messages can be retrieved from multiple user folders (i.e., mailboxes). Thus combination therefore reads on the claim limitation as claimed.

The examiner further notes that these citations were set forth in the previous action. However, beside a general allegation that the references fail to disclose the limitations, Applicant's current argument does not specifically address the citations or the argument. Therefore, the rejection is maintained for at least this reason as well.

B. The combination of *Hughes* and *Graham* discloses the limitations of claims 46-49.

Claim 46 recites subsequent to computing the first and second message tags (by concatenating the sender ID and message submission time), replacing the first and second message tags respectively with results of applying a hash algorithm to the first and second resulting string.

This limitation does not overcome *Hughes* and *Graham* for the following reasons. The rejection relied on the combination of *Hughes* and *Graham* to disclose concatenating a message sender ID and a message submission time [*Hughes*, column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2 where : *Hughes* hashes a "message set" where the message set includes the "current time" and sender ID. *Hughes* describes the "current time" as "the time that the message was sent by the sender" & *Graham*, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message].

Graham at paragraph 218 further discloses hashing concatenation of time-stamp and source identifier of a message. *Hughes* then discloses replacing the message ID with the results of hash [abstract]. For the foregoing reasons, *Graham* and *Hughes* discloses the new limitations as claimed.

IV. CLAIM REJECTIONS - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

A. Priority date for the concatenating and hashing feature

The independent claims contain a limitation reciting concatenating a message sender and a message sender submission time into a string and applying a hash algorithm to that first string. This feature does not seem to be described or supported in Applicant's provisional applications

60/268,092 or 60/347,238. Thus, for the purposes of this rejection, this feature has the priority date of February 12, 2002 which is the filing date of Applicant's application.

If Applicant disagrees with this assessment, Applicant should cite the specific pages in either application which provide written description consistent with § 112, 1st paragraph of the concatenating and hashing feature.

B. Claims 1, 3, 7, 15, 18, 20, 37, 39, 41, and 45 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Hughes*, U.S. Patent No. 6.122.372, in view of *Yeager*, U.S. Patent No. 6.167.402, in further view of *Graham* et al., U.S. Patent Publication No. 2002\|0178271 ["*Graham*"].

Applicant should note that all citations are to *Hughes* unless otherwise noted.

Claims 1, 15, 37, 41, and 45

As to claim 1, *Hughes* as modified by *Yeager* and *Graham* discloses a method for identifying a unique electronic mail message in a plurality of electronic mail messages extracted from an electronic mail messaging system, the method comprising:

retrieving from a first mailbox on the electronic mail messaging system a copy of a message [*Yeager*, column 2 «lines 49-62» : teaching the well known feature of retrieving messages from a user's inbox];

computing a first message tag by concatenating a message sender of the first message and a message sender submission time of the first message into a first resulting string [column 10 «lines 30-35» \| column 11 «lines 16-20» \| Figure 2 where : *Hughes* hashes a "message set" where the message set includes the "current time" and sender ID. *Hughes* describes the "current time" as "the time that the message was sent by the sender" & *Graham*, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message];

storing the first message in a message archive [column 13 «lines 58-59»: storing the message in a database];

storing the first message tag in a single shared index file [column 1 «lines 20-21»: the message ID is generated as a hash function | column 13 «lines 56-57»: storing the message ID in the database | column 3 «lines 23-30» | column 19 «lines 17-27»: *Hughes* implies an index file through his teaching of searching for a match in the database];

retrieving from a second mailbox on the electronic mail messaging system a second message, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox [*Yeager*, column 2 «lines 49-62» : teaching the well known feature of retrieving messages from a user's inbox | column 7 «line 66» to column 8 «line 1»: disclosing multiple user folders (i.e., mailbox) for different users & *Hughes*, Fig. 10 «item 1002»: retrieving a message];

computing a second message tag concatenating a message sender of the second message and a message sender submission time of the second message into a second resulting string [*Hughes*, column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2 where: *Hughes* hashes a "message set" where the message set includes the "current time" and sender ID. *Hughes* describes the "current time" as "the time that the message was sent by the sender & *Graham*, 0218: disclosing hashing a concatenation of a time-stamp and source identifier (i.e., message sender) of a message]; and

reviewing a list of message tags including the first message tag stored in the single shared index file [column 19 «lines 21-23»: reviewing the database of message IDs], wherein:

in the event the second message tag matches the first message tag, determining the second message is a duplicate of the first message already stored in the message archive [column 19 «lines 17-27»];

in the event the second message tag does not match any of the list of message tags including the first message tag, determining the second message is not a duplicate message already stored in the message archive and subsequently:

storing the message tag in the message archive [column 19 «lines 37-47»]; and

storing the second message tag in a single shared index file [column 19 «lines 37-47»].

As indicated by the foregoing mapping, *Hughes* does not expressly disclose (1) retrieving a first and second message from a first and second mailbox, respectively, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox; and (2) concatenating the message sender and a message submission time. However, both of these features were well known in the art at the time of Applicant's invention as evidenced by *Yeager* and *Graham*.

1. *Yeager* discloses retrieving a first and second message from a first and second mailbox, respectively, wherein the second mailbox is associated with a different electronic mail recipient than the first mailbox.

Yeager teaches the first feature in an invention directed towards a message store that contains an index file [abstract]. Like *Hughes*, *Yeager* discloses hashing email messages in order to prevent storing duplicate copies within a message store [column 10 «lines 5-7»]. Unlike *Hughes*, *Yeager* discloses (1) retrieving from a mailbox on the electronic mail messaging system a copy of the message [column 2 «lines 49-62» : teaching the well known feature of retrieving

messages from a user's inbox] and (2) that the messages are retrieved from a plurality of mailboxes associated with multiple electronic mail recipients [column 2 «lines 49-62» | column 7 «lines 7-11»].

Despite not expressly teaching a plurality of mailboxes, this feature is implied by the fact that there are multiple mail recipients. It would have been obvious to one ordinary skill in the art to have reasonably inferred the presence of multiple inboxes (and therefore retrieval from them) when there are multiple recipients. It would have been further obvious to one of ordinary skill in the art to have modified *Hughes* invention with *Yeager*'s teachings retrieving and storing email messages. Given *Hughes* teaching that his invention is compatible with emails [column 8 «lines 43-44»], one would have been motivated to adapt *Hughes* message store to be compatible with email systems to increase the store's functionality and usefulness.

2. *Graham* discloses hashing a concatenation of a message time-stamp and message source identifier.

While *Hughes* discloses computing a message tag by using a message sender and message submission time, *Hughes* does not expressly disclose concatenating these two properties. However, *Graham* discloses concatenating a message time stamp (i.e., submission time) and a message source identifier where *Graham* describes this as a user identifier (i.e., message sender) [*Graham*, Fig. 6B describing Source ID as a user identifier | 0218].

Applying *Graham*'s teaching to *Hughes* would result in the concatenation of *Hughes*' sender ID [Fig. 2 «item 214»] (i.e., *Graham*'s source ID) and *Hughes*' time [Fig. 2 «item 207»] (i.e., *Graham*'s timestamp). This combination reads on the claimed limitation.

It would have been obvious to one of ordinary skill in the art to have modified *Hughes* to include *Graham*'s teachings of hashing a concatenation of a message's source ID and timestamp.

Such a modification to *Hughes*' system is an example of simple substitution of one known element (*Hughes*' hashing of message properties) for another (*Graham*'s specific teaching of hashing a concatenation of a message's source ID and timestamp) to obtain predictable results (*Hughes*' invention modified to create a message ID by hashing the concatenation of the sender ID and time stamp). *See* MPEP § 2143.

As to claims 15, 37, 41, and 45, they are rejected for at least the same reasons set forth for claim 1.

Claims 3, 18, and 39

As to claim 3, *Hughes* as modified by *Yeager* and *Graham* discloses applying a hash algorithm to the message tag forms a uniform string wherein the uniform string, wherein the uniform string has a predetermined length [column 10 «lines 30-35» | column 11 «lines 16-20» | Figure 2]. As to claims 18 and 39, they are rejected for at least the same reasons set forth for claim 3.

Claims 7 and 20

As to claim 7, *Hughes* as modified by *Yeager* and *Graham* discloses the index file is stored in a relationship database system [column 3 «lines 23-30» | column 19 «lines 17-27»]. As to claim 20, it is rejected for at least the same reasons set forth for claim 7.

Claims 46-49

Hughes as modified by *Yeager* and *Graham* discloses:

subsequent to computing the first message tag [*Graham*, 0218: disclosing concatenating (then hashing) the message time-stamp and source ID (i.e., sender), replacing the first message tag with results of applying a hash algorithm to the first resulting string [*Hughes*, abstract:

disclosing that the message ID is replaced with the results of a hashing of the message body and identification information (i.e., in view of *Graham*, this information includes concatenation of time stamped and source ID)]; and

subsequent to computing the second message tag, replacing the second message tag with results of applying the hash algorithm to the second resulting string [see citations above to *Graham* and *Hughes* | *Yeager*, column 7 «line 66» to column 8 «line 1»: disclosing multiple user folders (i.e., mailbox) for different users].

C. Claims 4, 19, and 40 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Hughes*, in view of *Yeager* and *Graham*, in further view of *Mattis* et al, U.S. Patent No. 6.292.880 ["*Mattis*"].

As to claim 4, while *Hughes* as modified by *Yeager*, *Graham*, and Mattis teaches hashing message properties, *Hughes* does not expressly disclose utilizing MD5 as the hash algorithm. However, implementing MD5 as a hash algorithm with respect to messages was well known in the art at the time of Applicant's invention.

Mattis expressly discloses hashing message tags using the MD5 algorithm to form a uniform string [*Mattis,* column 9 «lines 48-63»]. It would have been obvious to one of ordinary skill in the art to have implemented *Hughes* hashing algorithm as an MD5 algorithm. The MD5 hashing algorithm was well known in the art at the time of *Hughes* invention.

As to claims 19 and 40, they are rejected for at least the same reasons set forth for claim 4.

VI. CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DOHM CHANKONG whose telephone number is (571)272-3942. The examiner can normally be reached on Monday to Friday [10 am - 6 pm].

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thu Nguyen can be reached on (571)272-6967. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DOHM CHANKONG/
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